

Improving Teaching and Learning Using the Keeping Learning on Track Professional Development Program and Strategies

By Melisa Dobish, Jacqueline Griffiths, and Richard Meyer, Ed.D.

Abstract

This study examines the impact of implementing the professional development program, Keeping Learning on Track (KLT), on teaching and learning in a rural school in a Midwestern state. KLT was a program developed by Dylan William and his colleagues at the Educational Training Service and published by the Northwest Evaluation Association (NWEA). Teachers and administrators in the district were surveyed after using the KLT model for one to two years to determine the effectiveness of the program on teaching and learning. Survey results indicated that teachers felt that KLT improved their instructional practice and that KLT has improved student learning for students in their classrooms. In addition, teachers agreed that formative assessment is valuable for improving teaching and learning.

Introduction

In a world where standardized test results have great power over teacher evaluation, school program ratings, and funding, “teaching for the test” has become commonplace. Teachers and students must cram as much of the needed material into the curriculum as possible. Despite the obvious effort to improve standardized test scores, U.S. students are still only average compared with students around the world (Chappell, 2013; Fensterwald, 2013). With this, many could argue that U.S. students are crumbling under the pressure. Therefore, the education system will need to address the deficits in its program and work toward progress.

Regardless of this seemingly difficult task to accomplish, some schools have been implementing a program to increase student understanding. This program has been called several names, but is commonly known as Keeping Learning on Track (KLT) (Black & Wiliam, 1998; Wiliam, 2005). Keeping Learning on Track is a professional development program designed to allow teachers to work with their colleagues in a Teacher Learning Community (TLC) focused on formative assessment. According to Dylan Wiliam and his colleagues at ETS (Black & Wiliam, 1998), there is one big idea: evidence of student learning is used to adjust instruction to meet the needs of

students. There are five key strategies on which to focus in order to intervene in the way students think. These five strategies include: 1) teachers elicit evidence of student learning minute-to-minute and day-to-day, 2) teachers identify and share learning expectations with their students, 3) teachers structure opportunities for students to take ownership of their own learning, 4) teachers structure opportunities to activate students as instructional resources for one another, 5) teachers provide feedback to move learning forward and create a structure for students to act on it (Thum, Tarasawa, Hegedus, Yun, Bowe, 2015).

Review of Literature

Researchers have found that formative assessment has provided a positive experience for higher education students and teachers in both secondary and elementary settings (Torrance & Pryor, 2001; Weurlander, Soderberg, Scheja, Hult, & Wernerson, 2012). First, Weurlander et al. (2012) explored how medical students reacted to assessments both orally and written and as either a group or an individual task. More specifically, the researchers wanted to look at how students’ perceptions differed for two groups, one being the control group which focused on “right/wrong answers, individual performance, and delayed feedback” (p. 749), and the other being an experimental group which “focused on understanding/ problem-solving, group performance, and immediate feedback” (p. 749). The authors found three themes that emerged from the experiment including motivation, awareness, and tools for learning. First, students in both groups felt that the assessments, either individual or in a group, increased their motivation to study and learn. However, in the control group, students reverted back to memorization of terms and believed that understanding would come later. In contrast, students who were assessed as a group and received immediate feedback were motivated intrinsically by growing understanding and interest, and they were motivated extrinsically by pressure to keep up with their peers. Next, students in both groups reported an increase of learning awareness. The authors stated that students were more in tune with their own weaknesses and progress. Finally, through formative assessment, students changed

how they learned and what they learned. Thus, students in both groups perceived formative assessment to be a positive way to increase the learning experience. More specifically, students who were in the experimental group showed that they increased understanding through group assessment because they were more capable of seeing the whole picture.

Similarly, Torrance and Pryor (2001) looked at perspectives of formative assessment. However, these authors aimed to gain insight of teachers' perspectives of formative assessment in their own classroom. Torrance and Pryor (2001) conducted a program of two phases that collectively lasted a little over a year. During this time, teachers involved in the project underwent their own journey of learning and learning to teach using formative assessment strategies. In phase one, teachers took video and audio recordings of their class, then reviewed and critiqued them. In the second phase, the teachers used their new-found awareness and implemented changes within their classroom. Through this process, the teachers were able to interrelate their experiences and reveal common themes. First, the teachers explained that the heart of formative assessment is to create clear objectives for task and quality. Next, they found that questioning, observing for understanding of the process, reviewing the product, and finally, providing feedback for assignments were all connected to each other and to quality of education. In addition, the teachers explained that this process was a positive experience where they were challenged to change their old styles of teaching for a different and innovative way which fostered understanding of material for students. Thus, this study shows support for programs such as KLT from a teacher perspective, where the teachers were able to change their teaching style in order to increase student participation and understanding.

In addition to the positive experiences that have been documented, researchers have looked at the various factors of formative assessment and analyzed student outcomes. For example, in a study done by Bulunuz, Bulunuz, & Peker (2014), student science comprehension outcomes were analyzed based on the type of instruction given. In one group, instruction focused on hands-on learning. In the other three groups, instruction focused mostly on book work and terminology. The authors found that in the pre-test, all students performed poorly on physics-related concepts, such as law of motion and inertia. However, after the hands-on teaching of these concepts, students in the experimental group increased their scores significantly. In addition, they had significantly deeper understanding of these concepts than the students in the traditional setting. Thus, when a hands-on approach is used with instruction, students show better understanding of subject and score higher on assessments.

With this, it seems that some gaps in the research remain. For instance, formative assessment has been

explored in isolation of individual classrooms and studies. In addition, outcomes for this type of learning have been documented for effectiveness and have been shown to create positive perceptions for both teachers and students. However, KLT is a fairly new program that involves using formative assessment school-wide, rather than in individual classrooms. Little research has been conducted on how KLT has impacted schools on a broad level. It is crucial to understand how teachers have been reacting to and perceiving this new program in their school. This is important because their attitudes and perceptions may impact the effectiveness of KLT and the future of this program.

Beginning in the 2013-2014 school year, the Midwestern district began utilizing KLT as the district professional development for certified staff members. The intent was for this to be a three-year process led by teacher-leaders in the district. To initiate the plan, Dylan Wiliam spoke with all certified staff members including administrators. Then a cadre of teacher-leaders was provided three additional days of training in order to learn how to facilitate the Teacher Learning Communities within their school buildings. Throughout the next years, the KLT teacher-leaders led certified staff members through activities and discussions centered around formative assessment.

Current Study

This study aims to understand the effectiveness of the KLT program in this Midwestern town through teacher perception by generating questions to stimulate quantitative and qualitative data that will reflect the attitudes, perceived effectiveness, struggles, and positive outcomes surrounding the KLT program. In addition, this study aims to determine teachers' perspective of the impact of KLT on teaching and learning in their school and classroom. Four main questions were addressed through this study.

1. What are teachers' perspectives on the impact of KLT on instructional practices?
2. What are teachers' perspectives on the impact of KLT on student learning?
3. To what degree do teachers agree that KLT has been valuable for improving teaching?
4. To what degree do teachers agree that KLT has been valuable for improving student learning?

Method

This is a mixed method qualitative and quantitative research study using a sample of convenience to complete an on-line survey. The survey included a five point Likert scale with choices ranging from strongly agree to strongly disagree with neutral as an option. It also included open-ended questions in which participants could

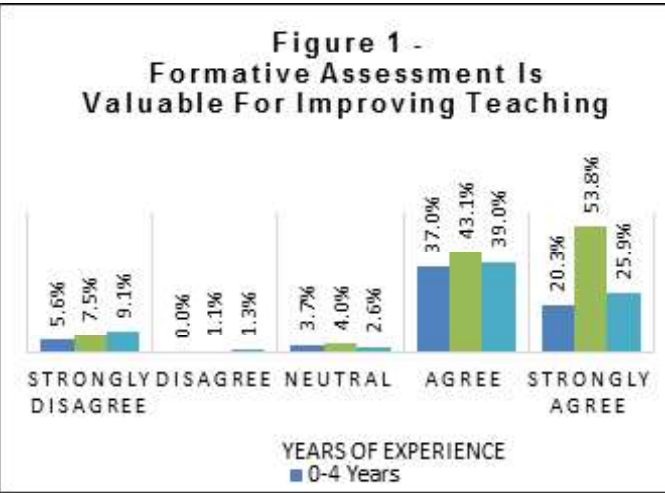
share additional perceptions regarding the KLT model. Upon receiving IRB approval, participants were asked to complete a 22 question on-line survey. Survey questions were very similar to the survey questions used in the study Keeping Learning on Track: A Case-study of Formative Assessment Practice and its Impact on Learning in Meridian School District study (Thum et al., 2015).

Participants in this study included 319 certified staff members from the district. All participants were adults who were working in the Midwestern district and had been exposed to KLT over the previous two school years. Of the participants, 86.4% had been participating in KLT for two years. When reporting the number of years in education, 17.7% had been in education one to four years, 57% had been in education between 5-24 years, and 25.2% had been in education for 25 or more years.

Findings

Question 1: Is formative assessment valuable for improving teaching?

Eighty-seven percent of teachers agree or strongly agree with this belief. In further analysis, participants were grouped according to whether they were teaching elementary, middle, or high school students. Of the total respondents, 305 were teaching in one of these three areas; whereas 14 were preschool teachers or non-classroom specialists. Of the 144 elementary teacher respondents, 88.2% agreed or strongly agreed that formative assessment is valuable for improving teaching. 87.2% of the 86 middle school respondents were in agreement, and 85.4% of the 75 high school teachers agreed or strongly agreed with the statement (See Figure 6). Further analysis revealed that 90.1% of teachers who had taught 1-4 years believed formative assessment was valuable for improving teaching; whereas, 87.4% of teachers in the field from 5-24 years believed this statement and 87.1% of teachers teaching over 25 years believed this to be true (See Figure 1).

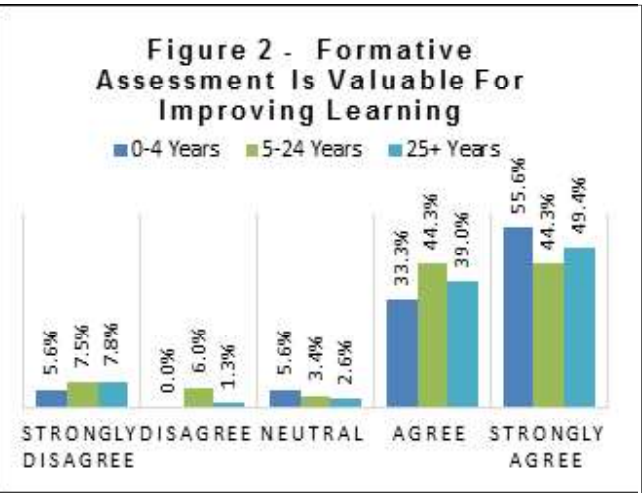


Question 2: Is formative assessment valuable for improving learning?

Eighty-eight percent of respondents agree or strongly agree that formative assessment is valuable for improving learning. Total respondents for this question were 305 with 144 identifying themselves as elementary, 86 as middle school, and 75 as high school teachers. As shown in Figure 6, of the 144 elementary teachers, 88.2% agreed or strongly agreed with the statement. 88.4% of middle school teachers and 88% of high school teachers agreed or strongly agreed. Furthermore, 88.9% of teachers teaching from 1-4 years believed that formative assessment is valuable for improving learning. 88.6% of teachers teaching 5-24 years believe this to be true, and 88.4% of teachers with more than 25 years of experience agreed or strongly agreed. (See Figure 2).

Question 3: Has KLT improved my instructional practices in the classroom?

Upon analysis of all teacher responses, 82.1% of the 319 respondents agreed or strongly agreed that KLT has improved their instructional practices. Of the 319 referenced, 299 respondents taught elementary through high school with 140 teaching elementary, 85 teaching middle school, and 74 teaching high school. Figure 6 shows that 85.8% of the elementary teachers agreed or strongly agreed that KLT improved their instructional practices; whereas 88.2% of middle school respondents and 73% of high school respondents agreed or strongly agreed. As shown in Figure 3, 87.1% of teachers with 1-4 years of experience agreed or strongly agreed that KLT improved their instructional practices in the classroom. Of the teachers with 5-24 years of experience 79.9% agreed or strongly agreed; whereas 84.4% of the teachers with over 25 years of experience felt the same way.



Question 4: Has KLT improved student learning in my classroom?

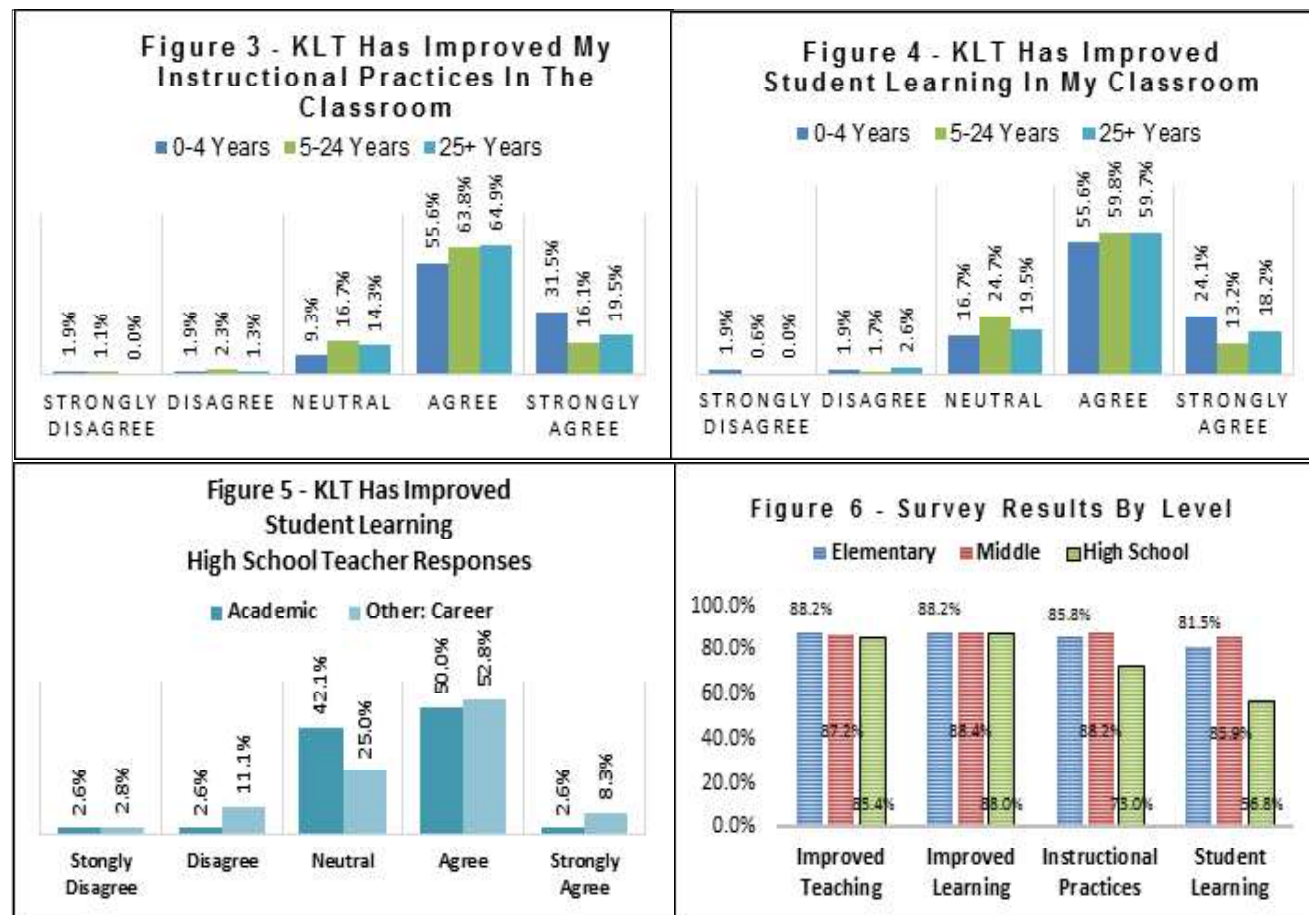
Teacher responses indicated that 75.3% of the teachers agree or strongly agree that KLT has improved student learning in their classroom. A total of 299 teachers responded to this question and identified as teaching at the elementary (140), middle school (85), or high school (74) level. 81.5% of elementary teachers, 85.9% of middle school teachers, and 56.8% of high school teachers agreed or strongly agreed that KLT has improved student learning in their classroom (See Figure 6). Upon further analysis of the responses by high school teachers, only 9.5% of the 74 respondents disagreed or strongly disagreed with this statement while 33.8% responded that they were neutral. With this high percentage of respondents indicating a neutral response, it is theorized that high school teachers do not feel they can or should determine how students would feel about their learning. Because the high school percentage was significantly different than the results of the other groups of raters and was also significantly different from the responses to other questions, another analysis was completed to determine if there was a difference between the responses of teachers teaching in core academic areas including language arts, math, social

studies/social science, science, and world languages and teachers teaching classes more geared toward vocational exploration including PE/health, English Language Learner, special education, art/music, career and technical education and other. Results of this analysis, as shown in Figure 5, indicated that 20 core academic teachers agreed or strongly agreed and 22 vocational-based teachers agreed or strongly agreed with the statement. In addition, 19 core academic teachers responded as neutral; whereas 9 respondents from the vocational-based group indicated a neutral response.

Teacher responses to this question based on years of experience yielded the following results as seen in Figure 4: 1-4 years, 79.7% agreed or strongly agreed; 5-24 years, 73% agreed or strongly agreed; and 25 or more years, 77.9% agreed or strongly agreed.

Discussion

This study suggests that teachers felt that KLT improved their instructional practice and that KLT has improved learning for students in their classrooms. In addition, teachers agreed that formative assessment is valuable for improving teaching and learning, and it is important to the work they complete on a daily basis.



This was true regardless of the number of years a teacher had been teaching or if they were teaching elementary level, middle school, or high school.

According to one participant,

"I think this has been the most applicable, user-friendly, and time-worthy school improvement model I've participated in. I am strongly in favor of continuing working with these materials and this model. It is practical and can be implemented in all settings with all students."

Similar to the Keeping Learning on Track study, our study also found that overall, teachers and teacher-leaders had positive experiences with the KLT professional development model and using formative assessments (Thum et al., 2015). One teacher leader had the following comments:

"I am a KLT leader, so I may be a little biased because I am 100% vested into this experience, but I am a firm believer that this program has helped our school, and more importantly our students....I love that in KLT, we get to share our experiences, good and bad with our peer teachers....Also, in our large group sessions, we have had such rich discussions about teaching and learning and how to move our learners forward..."

Limitations

The present study did not involve gathering data from teachers prior to the use of KLT as a professional development program. Therefore, it is unknown how the participants felt about formative assessment prior to participation in KLT. In addition, the present study did not take into account student perceptions regarding the strategies being used to teach them and the impact they feel it has on their learning. Future research regarding student perceptions and student learning might include student achievement data prior to and after the implementation of KLT to further explore the impact of KLT on student achievement.

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